## CLAIMS.

Claims 1 through 22 are cancelled.

- 23. (Previously presented) A method for assessing endothelial function, comprising:
  - a) recording patient's temperature at location distal to a selected site of creating an arterial occlusion:
  - b) compressing for a given period of time the patient's artery to impede distal blood flow and thereby creating a vasodilating stimulant;
  - c) removing the compression and thereby allowing blood flow to resume:
  - d) continuously recording the patient's temperature distal to the site of arterial occlusion; and
  - assessing the patient's endothelial function based on said recorded changes in temperature.
- (Previously presented) The method of claim 23, wherein providing a vasodilating stimulant comprises occluding blood flow.
- 25. (Previously presented) The method of claim 23, wherein the patient's artery is the brachial artery.
- 26. (Previously presented) The method of claim 23, wherein said temperature recording further comprises monitoring a change in temperature at one of the patient's fingertips distal to the arterial occlusion.
- 27. (Previously presented) The method of claim 24, wherein the vasodilating stimulant comprises occluding blood flow in the patient's arm.
- 28. (Previously presented) The method of claim 23, wherein the compression of the patient's artery is located in an extremity of at least one of (i) a leg, (ii) an arm. (iii) a wrist, or (iv) a finger.
- 29. (Previously presented) The method of claim 23, wherein said monitoring occurs from a time prior to the beginning of said compression until a time after said ceasing when said blood temperature has stabilized.